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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Yang Hwan No

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KED & ASSOCIATES, LLP
P.O. Box 221200
Chantilly, VA 20153-1200

EXAMINER

PERRIN, JOSEPH L

ART UNIT

PAPER NUMBER

1792

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/717,973	Applicant(s) NO ET AL.	
	Examiner Joseph L. Perrin, Ph.D.	Art Unit 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,5,6 and 10-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5,6 and 10-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Regarding the objections to the title and abstract, applicant's amendment renders the objections moot.
2. Applicant's arguments in view of the amendment filed 09 January 2008 have been fully considered but they are not fully persuasive. In view of applicant's amendment, the rejections under § 112, second paragraph & §102(b) over NITSCHKE & KIM have been withdrawn. However, both NITSCHKE & KIM are rejected under §103 for reasons indicated below.
3. As previously indicated in the last rejection, applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.
4. Regarding the §103 rejection over NITSCHKE, applicant argues improper hindsight reasoning. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA

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1971). Each and every structural limitation claimed is taught by NITSCHKE. The only difference between NITSCHKE and applicant's claimed invention is the arrangement of the unit joint lines and perforated holes. As indicated in the previous Office action, it is well settled that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70. Applicant has not clarified on the record as to why such rearrangement is not obvious and why such rearrangement would fail to yield predictable results. Simply put, absent unexpected or unpredictable results, the simple rearrangement of perforated holes and joint lines is a *prima facie* obvious modification and well within the level and skill generally available to one having ordinary skill in the art. In addition, applicant appears to argue on page 15, middle paragraph, that there is no motivation in NITSCHKE to locate the joint as recited in claim 1. In response to applicant's argument that there is no motivation/suggestion to combine the references, it is noted that the Supreme Court decision in *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385 (U.S. 2007) forecloses a teaching, suggestion, or motivation (TSM) test as the only rationale in obviousness determination.

5. Regarding KIM, applicant points to portions of KIM not relied upon in the rejection in an attempt to belie the Examiner's position. It is of no moment whether KIM teaches other embodiments (i.e. other lifter/drum configurations) so long as the reference teaches the claimed embodiment wherein the joint is located between lifters, as indicated in Figures 6-8 of KIM and relied upon in the rejection. A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead

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away from the claimed invention. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984).

6. Regarding the newly submitted claims 16-21, these claims will be addressed in the subsequent portions of this Office action.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claims 20-25 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In claim 20, the claimed "base pane" is considered new matter. Correction is required.

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 20-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 20, it is unclear what is meant by the phrase "base pane". Also in claim 20, the phrase "wherein ends of the sidewall are

joined together” is considered indefinite since it is unclear how the front or rear ends of the sidewall can be joined. Clarification and correction are required.

Claim Rejections - 35 USC § 103

11. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

12. Claims 1-2, 5-6, 11 & 16-25 are rejected under 35 U.S.C. 103(a) as being obvious over WO 03/054274 to NITSCHKE (Nat. Stage U.S. Patent No. 6,935,143 relied upon as unofficial translation). Re claims 1, 16-20 & 24-25, NITSCHKE teaches a laundry drum for a conventional washing machine (common knowledge to include a housing, tub, perforated rotatable drum with plural columns of holes between equally spaced lifters and a motor), the drum having a joint portion (5) extending on the sidewall in a longitudinal direction (see Figures 3-4 and relative associated text). Re claims 2, 5, 6, 21-23, NITSCHKE further discloses the joint having curled portions coupled together (Figure 5), plural intermittent joint lines (Figures 3-4) and the well-known concepts of coupling via welding or riveting (col. 2, lines 27-40 & col. 3, lines 32-36). Re claim 11, the joint line lies closer to the lifter (13) than the remainder of the inner drum surface which would comprise plural holes (see Figure 4). Hence, each and every structural limitation claimed is taught by NITSCHKE. The only difference between NITSCHKE and applicant's claimed invention is the arrangement of the unit joint lines, perforated holes and lifters. As indicated in the previous Office action, it is well settled that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

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Applicant has not clarified on the record as to why such rearrangement is not obvious and why such rearrangement would fail to yield predictable results. Accordingly, absent unexpected or unpredictable results, the simple rearrangement of perforated holes and joint lines around the lifters is a *prima facie* obvious modification and well within the level and skill generally available to one having ordinary skill in the art.

13. Claims 1-2, 20, 22 & 24 are rejected under 35 U.S.C. 103(a) as being obvious over U.S. Patent No. 5,802,886 to KIM. As illustrated in Figure 6, KIM discloses a conventional washing machine having a housing, a tub (2), a perforated drum (3) rotatably installed in the tub, with a driving motor. KIM further discloses the drum having plural equally spaced lifters (4), a joint portion (3e) extending on the sidewall in a longitudinal direction and spaced from the lifters and perforations, with the joint having first and second curled ends engaged to be joined (see Figures 6-8 and relative associated text). The only difference between KIM and applicant's claimed invention is the arrangement of the unit joint lines, perforated holes and lifters. As indicated in the previous Office action, it is well settled that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70. Applicant has not clarified on the record as to why such rearrangement is not obvious and why such rearrangement would fail to yield predictable results. Accordingly, absent unexpected or unpredictable results, the simple rearrangement of perforated holes and joint lines around the lifters is a *prima facie* obvious modification and well within the level and skill generally available to one having ordinary skill in the art.

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14. Claims 5-6, 10-19, 21, 23 & 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over KIM in view of NITSCHKE (both previously cited). Recitation of KIM is repeated here from above. While KIM discloses the joint located between the lifters and on the lifter readable as being indistinguishable from the lifter and holes, KIM does not disclose forming joint lines by welding/riveting or as a "coupling member" (claims 5-6, 21 & 23), the joint portion being closer to the lifter than the adjacent column of holes or between the lifter and holes (claims 10-13, 16-17 & 19), equal distances between the joint portion and lifter as well as the lifter and column of holes (claims 14, 18 & 25), and the lifter being on a centerline between the joint portion and the column of holes (claim 15). NITSCHKE is recited as above. Thus, the combination of "old elements" in the references would yield the same predictable results as claimed. NITSCHKE also discloses rearranging the location of the joint portion on the inner drum (see Figure 3) or under a lifter (see Figure 4). Both KIM and NITSCHKE disclose configurations of the joint in different rearrangements. A person of ordinary skill in the art, upon reading the reference, would also have recognized the desirability of the location of the joint as both disclose the preferred embodiment as being at or near the lifter which would provide an indistinguishable appearance of the drum joint. Thus, it would have been obvious to a person of ordinary skill in the art to try the rearrangement of the joint near the lifter (i.e. between the lifter and the general inner drum surface containing perforations) to hide the joint in an attempt to increase aesthetics, as a person with ordinary skill has good reason to pursue the known options within his or her technical grasp (i.e. it is common sense to manufacture more aesthetic component, for instance, to increase sales). In

turn, because the simple rearrangement of the joint location has the predictable result of the prior art, it would have been obvious to rearrange the joint location in the manner claimed by applicant. That is, there appears to be nothing unexpected in rearranging the location of the joint and one having ordinary skill in the art would have found it "obvious to try" the limited number of configurations of the joint location in order to achieve the claimed drum configuration. The Examiner further notes that it is well settled that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Conclusion

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

16. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph L. Perrin, Ph.D. whose telephone number is (571)272-1305. The examiner can normally be reached on M-F 8:00-4:30.

18. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael E. Barr can be reached on (571)272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

19. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Joseph L. Perrin/
Joseph L. Perrin, Ph.D.
Primary Examiner
Art Unit 1792

JLP